

# SUSTAINABILITY

*Making an Impact on U.S. Manufacturing*



**Sustainability has become a driver of economic growth as global demands for diminishing resources increase, renewable and alternative energy technology needs expand, and as environmental concerns heighten.**

Whether in response to rising energy and resource costs or as part of a corporate growth strategy, sustainability helps manufacturers gain a competitive edge and maintain profitability and job growth while increasing energy efficiency and reducing environmental impacts. The Manufacturing Extension Partnership – part of the National Institute of Standards and Technology (NIST) and the U.S. Department of Commerce (DoC) – focuses on sustainability as a key business growth strategy to improve U.S. manufacturing competitiveness. MEP is partnering on federal initiatives to help companies: 1) gain a competitive edge by reducing environmental costs and impact and 2) enter new markets by developing environmentally focused materials, products, and processes.



**E3 - ECONOMY, ENERGY, AND ENVIRONMENT** is a coordinated federal and local technical assistance initiative that is designed to improve production and profitability while reducing energy usage and environmental impact. E3 doesn't look only at cost savings – it seeks out opportunities for growth. Joining forces with the local community, E3 provides manufacturers with customized, hands-on assessment of production processes and assists with the implementation of energy-saving projects. As a result E3 is:

- Improving the profitability and competitiveness of manufacturers
- Helping foster a green workforce by training and equipping workers with the skills necessary to compete in a global economy
- Stimulating the local economy by creating new, well paying jobs and helping to retain existing ones; and
- Reducing environmental impacts

Federal partners include the U.S. Department of Commerce, U.S. Environmental Protection Agency, U.S. Department of Labor, the U.S. Small Business Administration, and the U.S. Department of Agriculture.

**E3's GREEN SUPPLIERS NETWORK.** Manufacturers wishing to target their supply chains turn to E3's Green Suppliers Network. The Green Suppliers Network is a green global marketplace that helps manufacturers and supply chains nationwide enhance competitiveness, reduce cost and improve performance. For each supplier facility, the Green Suppliers Network team conducts a customized technical assessment of production processes to help manufacturers reduce waste and operate more efficiently. The GSN effort is championed by 20 Original Equipment Manufacturers, and it has conducted over 180 sustainability assessments to date.

## Measuring Results

*Impacts are based on clients receiving E3 services in FY2014*



**\$48 MILLION**

Environmental Savings



**\$31 MILLION**

Energy Savings



**690 MILLION**

Kilowatt Reduction in Energy

## NEXT STEPS



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# SUSTAINABILITY



“EarthColor understands the effort and commitment that goes into maintaining a sustainable and socially responsible business. Creating environmentally friendly media, implementing green printing practices, and working with customers equally committed to a cleaner environment allows us to function as a true sustainable print communications provider. Working with NJMEP has helped make that happen. We had been diligently working to weave sustainability into the fabric of our organization and supply chain. Now, thanks to the GSN, we’ve gone another yard in our journey.”

David Podmayersky, Chief Sustainability Officer

## ENHANCING A COMMERCIAL PRINTER’S SUSTAINABILITY JOURNEY

EarthColor is an award winning, highly innovative commercial printer that has a long standing commitment to the environment. Since 1982, EarthColor has brought a wide range of printing expertise to its customers along with environmentally friendly business practices. The company quantifies and publishes its environmental sustainability efforts and performance in its annual Sustainability Report. Based in Parsippany, New Jersey, EarthColor employs around 300 people.

**Situation.** In striving to lead the print industry in new practices and ideas to reduce the footprint of the projects the company produces for its customers, EarthColor wanted to implement a comprehensive green program that would encompass every stage of its manufacturing process. To accomplish this, EarthColor worked with New Jersey Manufacturing Extension Program, Inc. (NJMEP) – a NIST MEP affiliate. Through NIST MEP’s program, the E3 Green Suppliers Network (GSN), EarthColor would be able meet to its objective.

**Solution.** The E3 GSN expands the lean definition of waste to include environmental considerations. Designed for small and mid-sized manufacturing suppliers, the program includes Lean & Clean on-site reviews that produce measurable business and

environmental impacts. To achieve EarthColor’s objectives the program used the expertise of the U.S. Environmental Protection Agency, State Environmental Experts, Original Equipment Manufacturers, Suppliers and NJMEP. The local team conducted a review of EarthColor’s manufacturing processes and provided recommendations that were implemented through training on the shop floor. The deliverables included a Value Stream Mapping Plan and corresponding Training, the Current and Future State Green Supplier Maps which included Green Metrics, Operational Metrics for the selected Product flow and a Green Supplier Report along with VSM workbooks for participants. EarthColor achieved significant cost savings and established a plan for continuous improvement as a result of the project, which took less than 90 days to complete.

**\$3M in new/retained sales**  
**5 new employees**  
**Cost savings of \$500,000**  
**\$200,000 investment in new products and/or processes**

## JOIN THE DISCUSSION



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